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ISO SC4/WG10 STEP Modularization PWI Status Report

Bordeaux WG10 Plenary

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Agenda

- **Accomplishments since Melbourne**
- **Project deliverables status update**

Accomplishments Since Melbourne

- **Supporting nominated modules teams**
  - **Shape appearance and layers suite of nine modules passed their DTS ballot!**
    - **Reviewed all issues with project leader - several were referred to WG10**
  - **Minimal support provided to PDM/EACM modules teams**

Accomplishments Since Melbourne(2)

- **STEP Modularization Strategy**
  - **Revision to STEP/SC4 Industrial Data Framework delivered**
  - **NIST Modules Repository meetings/calls**
  - **May workshop in London**
    - **First draft of Sample Modular AP**
    - **First draft of "modularized AIC"**
    - **Harmonization recommendation**
  - **Continued EXPRESS/XML participation in support of modules repository/catalogue**
    - **participated in P28 London workshop**

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__Project Plan Status__

As of September 19, 1999

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__Status of Deliverables(1)__

- **AM Development Guidelines**
  - **No change since Lillehammer**
  - **Some updates based on DTS should me made**
- **AM Validation Guidelines**
  - **Initial IDEF activity model developed September 1998**
- **AM/AP Integration/Harmonization Guidelines**
  - **Now "Application Module Development Points within the Application Protocol Development Process"**
- **AM Development Recommended Practices**
  - **New document starting from content in Framework**

Status of Deliverables(2)

- **Guidelines for the content of application protocols using application modules**
  - No update
- **Overview Paper and Presentation**
  - Papers and presentations available
  - *** Half day overview in Bordeaux!
- **Framework for AP/AM Categorization**
  - SC4 Industrial Data Framework
    - Published revision for review/overview in Bordeaux
  - New "Recommended Practices for Modules Developers"
    - No first draft yet
- **At least 2 example AM suites from different industries**
  - PDES, Inc. PDM planning ballot this year
  - EACM has adopted modular approach

Status of Deliverables(3)

- **Example AP using AM**
  - *** Small "parts catalog" AP and "big module" created at May workshop in London
  - *** It uses 15 of the PDM modules
- **AM Catalogue example/demonstrator**
  - Still separate demos of repository, catalogue, UoF library
- **Proposal for SC4 support processes**
  - Technical Specification ballot content/process agreed
  - "Foundation modules" belong to WG12, more application oriented belong to WG3 or JWG9
  - *** Recommendation for Harmonization Team developed at May workshop in London

Status of Deliverables(4)

- **Draft Part 1 amendment**
  - **No owner identified**
- **Impact paper Integrated and Common Resources**
  - **First draft on team site**
- **Impact paper Implementation Methods**
  - **First draft on team site**
  - **if EXPRESS amendment is approved, we need to amend these**
  - **Part 21 Edition 2 DIS out for ballot**
- **Impact paper EXPRESS-X**
  - **First draft on team site**
- **Impact paper EXPRESS-2**
  - **EXPRESS modularization amendment DIS technically ready**

Status of Deliverables(5)

- **Impact paper WG10 Data Architecture PWI**
  - **brainstorming at London workshop**
- **Impact paper on Vendors**
  - **first draft on team site**
- **Impact paper on Users**
  - **First draft on team site**

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PWI Plans(1)

- **Address issues from Sample AP review**
- **Address issues from Harmonization team, process and infrastructure proposals**
- **First draft of remaining impact papers**
- **Supporting NIST Modules Repository**
- **First draft of Guidelines for the Content of Application Extensions and extended APs**
- **Complete EXPRESS amendment**
  - **Minor P21/P22 updates based on EXPRESS amendment for modularization need to be completed as well**

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PWI Plans(2)

- **Probably need another "final" STEP Modularization workshop after Bordeaux**
- **Probably need a workshop supporting modularization teams**
  - **SC4 wide? Specific to PS? PDM? Others?**
  - **Looking at a PDM and AP210 workshop in September with Data Integration Architecture PWI**
- **Goal of completion by Bordeaux not met**
  - **Need to determine balloted documents vs. supporting documents and prepare ballots**
  - **Now hoping to complete Charleston ISO**

Draft Recommendation from London Workshop

- **The following recommendation was drafted: this will be discussed with WG10, WG3 and WG12 at Bordeaux, with the intent of submitting a Last Day resolution for consideration by SC4.**

- **WG10 recommends that a new team be created under WG10 (expected to be moved later to another WG) called the "STEP Modules Harmonization Team" with the following responsiblities:**
  - **identify commonality across existing and proposed STEP APs, based on industry requirements**
  - **facilitate the exploitation of commonality through the development and use of modules**
  - **support the development and standardization of APs, modules and IRs by teams working in WG3, JWG9, and WG12**

Draft Recommendation from London Workshop(2)

- **The STEP Modules Harmonization team will perform the following tasks:**
  - **facilitate harmonization workshops (typically 2-4 per year);**
  - **build and maintain knowledge of the full scope of AP development within SC4 (i.e., "keep the big picture")**
  - **create and maintain tools such as a catalogue of modules (covering those in development as well as published modules), usage by APs and other modules, UOF repository, module repository, etc.**
  - **maintain an issues log for development and use of modules, and work with other teams to resolve issues**
  - **report to SC4 on the level of harmonization achieved within and between specific module suites as requested by module/AP development teams, to act as the arbitrator in cases of dispute**

Draft Recommendation from London Workshop(3)

- **WG10 recommends that SC4 request nominations to this team from P-members and A-liaisons, to play the following roles:**
  - **Team leader**
  - **industry/application/domain expert**
  - **information requirements analysis expert**
  - **interpretation/interoperability expert**
  - **harmonization infrastructure developer**

Sample Modular AP

- **Scope is:**
  - **Product Types**
    - **Products that are parts and assemblies**
  - **Product Data**
    - **Product definition views data pertaining to the completed design phase of a product's development;**
    - **Data that identify the supplier of either the product or the design;**
    - **The identification of an altenative name or label for a part or assembly;**
    - **The identification of the security classification of a single part or a part when it is a component in an assembly.**

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Activity Model

Product requirements → Design and Release Product → Product definition

Parts list

Existing parts catalogue → Populate Parts Catalogue → Updated parts catalogue

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Product Categorisation

Identification Assignment

Alias Identification

Product Identification

Person Organisation Assignment

Person Organisation

Product Structure

Product Version Structure

Product Version

Part And Version Identification

Part Structure

Part View Definition

Product View Definition

Approval

Date Time

Parts Catalogue Data

Date Time Assignment

Product View Definition Structure

Security Classification